

Remarks

This Application has been carefully reviewed in light of the Office Action mailed August 24, 2006. At the time of the Office Action, claims 1-26 were pending, claims 1-18 and 21-26 were rejected and claims 19-20 were withdrawn. Applicants have amended claims 1, 15, 23, 25 and 26 and have canceled claims 3, 21, 22 and 24 to clarify the subject matter in which the Applicants claim as their invention and to advance prosecution in this case and not as a result of any prior art. No new matter has been introduced by these amendments. Applicants respectfully request reconsideration and favorable action in this case.

Claims 21-26 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Without waiver or prejudice, Applicants have amended claims 23, 25 and 26 and have canceled claims 21, 22 and 24 to advance prosecution in this case. Pending claim 23 recites that the number of spaced apart flashes is 25, which is supported by Example 5 of the specification. (p. 12, l. 32-p. 13, l. 2). Pending claim 25 recites that the cumulative intensity of the 25 spaced apart flashes is 0.3 J/m^2 , which is supported by Example 5.¹ Pending claim 26 recites that the first period of time is sufficient to cure the first portion 88% and the second period of time is sufficient to cure the second portion 89%, which is supported by Example 5. (p. 13, ll. 5-7). Applicants respectfully request reconsideration and withdrawal of this rejection since the pending claims satisfy the written description requirement under 35 U.S.C. § 112, first paragraph.

Claims 1-18 and 21-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *De Sorgia* (U.S. Patent No. 3,943,046) in view of *Mibu* (U.S. Patent No. 4,276,479) and *Spinelli* (U.S. Patent No. 4,404,248). Applicants respectfully request reconsideration of this rejection of claims 1-18 and 21-26 because the proposed *De Sorgia*-

¹ Example 5 provides exposing a UV curable clearcoat composition to 25 flashes of 1.5 msec length of a VISIT xenon lamp having an average intensity of 8 W/m^2 ($8 \text{ J/m}^2\text{s}$). Therefore, each flash generates 0.012 J/m^2 ($0.0015 \text{ s} * 8 \text{ J/m}^2$). The cumulative intensity is 0.3 J/m^2 ($0.012 \text{ J/m}^2 * 25$).

Mibu-Spinelli combination does not teach, suggest, or disclose various aspects of pending claims.

Pending independent claims 1 and 15 each recite a method “for curing a UV curable clearcoat composition [applied to] an article having a three-dimensional surface, wherein the article is an automobile; [to obtain] first and second cured portions forming a substantially cured clearcoat being substantially free of shadowing effects.” The proposed combination does not disclose, teach or suggest at least this limitation.

The Examiner admits that *De Sorgia* does not teach, disclose or suggest a UV curable clearcoat composition having first and second cured portions forming a substantially cured clearcoat being substantially free of shadowing affects on an article having a three-dimensional surface.

Mibu does not cure the defective teachings of *De Sorgia*. The Examiner contends that *Mibu* clearly shows illumination of a three-dimensional object, which would be substantially free of shadowing effects, by citing to Figure 3b. *Mibu* does not teach, disclose or suggest that a UV curable clearcoat composition is applied to a three-dimensional surface of an automobile. The claimed invention as recited in claims 1 and 15 is directed at a method of producing a two portion cured coating on an automotive exterior, which is suitable for commercial use, i.e. substantially free of shadow effects. At best, *Mibu* discloses curing cylindrical blocks so that the cured surface thereof has no crinkles or wrinkles and therefore has a glassy appearance. (col. 17, ll. 19-23). *Mibu* does not appreciate the problem of treating a three-dimensional automotive surface nor teach the solution as recited in claims 1 and 15.

The Examiner further contends that *Spinelli* teaches a clearcoat composition desirably applied as an exterior finish for automobiles (Abstract), which have a three-dimensional surface. However, *Spinelli* does not disclose, teach or suggest curing to form first and second cured portions to form a substantially cured clearcoat being substantially free of

shadowing effects on a three-dimensional automotive surface, and the Examiner does not posit otherwise.

For at least these reasons, claims 1 and 15 are patentable in light of the proposed combination. Applicants respectfully request reconsideration and allowance of these claims.

Moreover, claims 2, 4-14, 23, 25 and 26, which depend from claim 1, and claims 16-18, which depend from claim 15, are allowable because they depend from claims that have been shown to be allowable.

In addition, the dependent claims recite further patentable distinctions over the references of record. For example, claim 23 recites that the first light source is delivered in 25 spaced apart flashes of light. Claim 25 recites that the cumulative intensity of the spaced apart flashes is 0.3 J/m^2 at 320 nm. The beneficial result of obtaining a cured three-dimensional article suitable for commercial use by operating with these range is supported by Example 5. Each of the claimed values of 25 flashes and intensity of 0.3 J/m^2 at 320 nm is not taught by the proposed combination. The Examiner's Office action does not provide otherwise. Instead, the Examiner posits that flashing and intensity are "a result effective variable," thereby rendering the values obvious in light of the teachings of the proposed combination. Assuming *arguendo* that intensity is "a result effective variable," the Examiner's *prima facie* case of obviousness can be overcome by showing the criticality of the claimed value. *In re Woodruff*, 16 USPQ2d 1934 (Fed. Cir. 1990). Each of these claimed intensity and flashes is critical to the Applicants' invention of a method for curing a UV clearcoat on a three-dimensional automobile surface without substantial shadowing effects suitable for commercial use. Neither the criticality nor any of the claimed value are taught or suggested by the proposed combination. For at least these reasons, claims 23 and 25 are patentable over the art of record.

Moreover, pending claim 26 recites an example of the extent of cure needed to provide a cured three-dimensional automobile article suitable for commercial use, as supported

by Example 5. Claim 26 recites that the first period of time is sufficient to cure the first position 88% and the second period of time is sufficient to cure the second portion 89%. The references of record do not provide a method in which 25 spaced apart flashes of light (claim 23) is utilized to provide the amount of curing recited in claims 26. For at least this reason, claim 26 is allowable over the references of record.

Claims 9-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *De Sorgia* in view of *Mibu* and *Spinelli*, and further in view of *Takamizawa* (U.S. Patent No. 4,359,369). Claims 9-10 depend from claim 1, which Applicants have shown above to be allowable, and are allowable for at least this reason. In addition, claims 9-10 recite further patentable distinctions over the references of record. However, to avoid burdening the record and in view of the clear allowability of claim 1, Applicants do not specifically address these reasons in this response. Applicants reserve the right to present these reasons in a future response if appropriate. For at least these reasons, Applicants respectfully request reconsideration and allowance of claims 9-10.

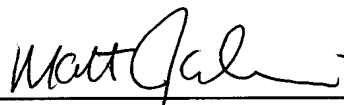
CONCLUSION

Applicants have made a genuine effort to respond to the Examiner's objections and rejections in advancing the prosecution of this case. The present amendments were not earlier presented because the amendments and remarks submitted with the prior amendment addressed all stated rejections in the Office Action. The present amendments and remarks are directed at further illustrating that the Applicants' claimed curing method is patentable. The Examiner has already conducted a search on this concept since it was recited in the original claims. Therefore, the present claims do not raise any new issues for search or consideration and do not require any further searching by the Examiner. As such, Applicants submit that the amendment is appropriate for entry, and that the claims are in a condition for allowance. If the Examiner believes that a telephone conference will advance prosecution of this application, the Examiner is highly encouraged to telephone Applicants' attorney at the number given below.

Please charge the additional claims fees to the Deposit Account of Applicants' assignee, Ford Global Technologies LLC, No. 06-1510 or 06-1505.

Respectfully submitted,

JOHN GERLOCK, et al.

By 
Matthew M. Jakubowski
Reg. No. 44,801
Attorney for Applicants

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BROOKS KUSHMAN P.C.
1000 Town Center, 22nd Floor
Southfield, MI 48075-1238
Phone: 248-358-4400
Fax: 248-358-3351